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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,505	02/07/2002	Ikuo Kawamoto	020532	9521

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ARMSTRONG, WESTERMAN & HATTORI, LLP
1725 K STREET, NW
SUITE 1000
WASHINGTON, DC 20006

EXAMINER

PRITCHETT, JOSHUA L

ART UNIT	PAPER NUMBER
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2872

DATE MAILED: 08/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/067,505

Applicant(s)

KAWAMOTO ET AL.

Examiner

Joshua L Pritchett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

DETAILED ACTION

This action is in response to Amendment B filed May 29, 2003.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 and 10-11 rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a polarizer with a quarter-wave plate laminated with an absorptive type polarizer laminated on a circularly polarized light separating sheet containing cholesteric liquid-crystal, does not reasonably provide enablement for a sheet-like member. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to a sheet-like member the invention commensurate in scope with these claims. The MPEP 2164.08(a) states, "when claims depend on a recited property, a fact situation comparable to Hyatt [In re Hyatt, 708 F.2d 218 USPQ 195] is possible, where the claim covers every conceivable structure (means) for achieving the stated property (result) while the specification discloses at most only those known to the inventor." Claim 1 does not recite any structural limitations to allow the sheet-like member to have the claimed functionality. Claims

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10 and 11 also lack any further structural limitations. Claims 2-9 do have further structural limitations and are therefore not included in this rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Weber (US 6,543,153).

Regarding claim 1, Weber discloses a polarizing member comprising a sheet-like member (110) formed so that linearly polarized light can be obtained as transmitted light through the sheet-like member (col. 26 lines 29-30), wherein the sheet-like member exhibits a transmittance difference of not larger than 6% between transmitted light components within a 20 nm-wide wavelength region in a transmission spectrum of light in a wavelength range of from 520 to 640 nm (Fig. 32 lines a and b) when the natural light is incident on the sheet-like member at any angle ranging from an angle viewing from a line normal to a surface of the sheet-like member to an election angle of 80 degrees with respect to the line normal to the surface of the

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sheet-like member (col. 26 lines 31-32). Weber states that the polarizer shown in Fig. 10 is an illustrative example of a polarizer (col. 2 lines 30-31) and Fig. 32 is a graph showing the performance of the polarizer created as taught in Example 7 (col. 26 line 28). Weber states that light polarized in the non-stretch direction is transmitted (col. 26 lines 29-30), thus the light transmitted has a linear polarization.

Regarding claim 2, Weber discloses the sheet-like member is constituted by a laminate of ~~an~~ an absorptive type polarizer (150) and a reflective type polarizer (110) allowing linearly polarized light to be transmitted therethrough and formed so that an axis of transmission of linearly polarized light through the reflective type polarizer and an axis of transmission through the absorptive type polarizer are parallel to each other (Fig. 32). In order for light to transmit through the entire polarizer the axis of transmission must be parallel.

Regarding claim 3, Weber discloses the reflective type polarizer (110) is constituted by a linearly polarized light separating sheet (171) which separates the linearly polarized light from the natural light by interfacial reflection in a multilayer film (Fig. 10). Weber states that the light separating sheet introduces reflections for light rays which are not desirable, thus the polarized light would be separated from the natural light by the reflections in the light separating sheet (171).

Regarding claim 4, Weber discloses an illuminator (172) comprising a planar light source (140) including a reflection layer (176) on a rear surface of the planar light source (Fig. 10), and a polarizing member (150) disposed on a front surface of the planar light source (Fig. 10).

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Regarding claim 8, Weber discloses a liquid-crystal display device (170) comprising an illuminator (172) and a liquid crystal cell (147) disposed on a light exit side of the illuminator (Fig. 10) through a polarizing member (150).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5-7 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weber.

Regarding claim 5, Weber teaches a planar light source (140), but lacks reference to an emission-line peak. It is commonly known in the art to have a light source that emits an emission light peak. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the Weber light source emit an emission-line peak for the purpose of accentuating a desired color in the display.

Regarding claim 6, Weber teaches the at least one prism array layer (113) disposed between the planar light source (140) and the polarizing member (Fig. 11). It would have been

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obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaches of Figs. 10 and 11 of Weber and place the prism array layer between the light source and the polarizing member for the purpose of limiting the amount of light incident the polarizer to prevent premature degradation of the polarizing member.

Regarding claim 7, Weber teaches wherein the at least one prism layer is formed by at least two prism array layers in upper (112) and lower layers (113), direction of arrangement of prism arrays of the at least tow prism array layers cross each other (Fig. 14).

Regarding claim 9, Weber teaches the polarizing member (150) and the liquid crystal cell (147) are bonded closely to each other through an adhesive so as to be integrated with each other (Fig. 10). It is well known in the art to use adhesive layer to attach two optical members together. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use an adhesive to attach the polarizing member to the liquid crystal cell of Weber for the purpose of permanently attaching the two elements together to prevent any change in the incident angles of the incoming light over time.

Regarding claims 10 and 11, Weber teaches the structural elements of claims 10 and 11 and therefore should be able to be modified by one of ordinary skill in the art in any manner necessary to create the claimed performance. It would have been obvious to one of ordinary skill in the art to have a very low transmission difference for the purpose of uniform and predictable transmission of light through the polarizing member.

Conclusion

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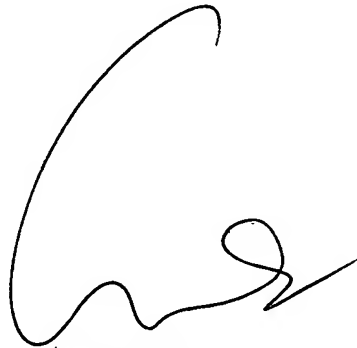
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua L Pritchett whose telephone number is 703-305-7917.

The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on 703-305-0024. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JLP
August 7, 2003

A handwritten signature in black ink, appearing to be 'Audrey Chang', with a large, sweeping initial 'A' and a stylized 'C'.

Audrey Chang
Primary Examiner
Technology Center 2800